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(54) Transmission/reception unit with bidirectional equalization

(57) The present invention refers to a transmission/reception unit that exchanges data with a remote unit by means of a channel using distributed modulation/demodulation treatment means. The transmission/reception unit includes equalization means (23) to equalize a first signal received from said remote unit and predistortion means to predistort a second signal transmitted to said remote unit. According to the invention, the unit is characterized in that the modulation/demodulation treatment means operate in a non-linear way and the unit includes means (230) to store information that is representative of a non-linear distortion of said modulation/demodulation treatment means and which defines a non-linear reference, and means (233) to adjust coefficients (CO) in the equalization means (23) according to the signal received from the remote unit and said representative information, the mentioned adjusted coefficients being transmitted to said predistortion means.

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EUROPEAN SEARCH REPORT

Application Number
EP 98 40 0543

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	KAMIO Y ET AL: "System design on wide-band 16 QAM/TDMA for land mobile communications" WIRELESS NETWORKS - CATCHING THE MOBILE FUTURE - 5TH IEEE INTERNATIONAL SYMPOSIUM ON PERSONAL, INDOOR AND MOBILE RADIO COMMUNICATIONS (PIMRC'94), AND ICCC REGIONAL MEETING ON WIRELESS COMPUTER NETWORKS (WCN), PROCEEDINGS OF WIRELESS NETWORKS CATCHING, pages 219-224 vol.1, XP002158491 1994, Amsterdam, Netherlands, IOS Press, Netherlands * abstract * * page 219, column 2, line 37 - page 220, column 1, line 12 * * page 220, column 1, line 45 - line 60 * * page 221, column 1, line 20 - line 31 * ---	1-8	H04B1/38 H04L27/10 H04L25/03 H04L27/20
A	WO 96 13109 A (ALCATEL NV ;PEREZ ABADIA MARIANO (ES); NUNEZ LEON DE SANTOS GREGOR) 2 May 1996 (1996-05-02) * abstract; claims 1-6; figure 3 * * page 1, line 15 - line 24 * -----	1-8	TECHNICAL FIELDS SEARCHED (Int.Cl.6) H04L H04B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
BERLIN	26 January 2001	Binger, B

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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